U.S. Patent Application No.: 09/529,374

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## IN THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

## Listing of Claims:

- 1. (Cancelled)
- 2. (Currently Amended) The prefabricated Prefabricated buildings or houses according to claim 20, wherein the floor frame (1) comprises four a standardized steel section sections (extruded profiles) C 160, St 37 or St 52 and at least one other possible section, wherein the sections are section is beveled and welded at their corners to form corners.
- 3. (Currently Amended) The prefabricated Prefabricated buildings or houses according to claim 20, wherein the flanges (2) are welded on the inside of the floor frame (1) in a definite well defined axial distance in order to fill an incurved part (12) of the flange with concrete without reinforcing the latter.
- 4. (Currently Amended) Prefabricated buildings or houses made by a modular steel frame construction method, such that fully-equipped modules or compartments are assembled in a specific order to compose a complete building or house, said modules comprising: the prefabricated buildings or houses comprising:
  - a) a ceiling frame, (6);

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- b) a floor frame (1);
- c) Z-shaped sections welded inside the floor frame (1); wherein the Z-shaped sections form flanges (2); and
- d) at least one pair of pillars (4) interconnected by welded bridges, and pillar, wherein the bottom of each of the pillars pillar comprises a first section and a second section, wherein the first section is connected to the floor frame (1) by a transverse bearer (7) and pins (5) and the top of each of the pillars second section is connected to the ceiling frame (6) by a transverse bearer (7) and pins (5);

wherein the sections are interconnected by the use of a transverse bearer and pins  $\psi$ 

wherein the a froor layer (3) comprising consists of concrete having a "d" of at least 100 mm, and undermost of an insulating layer of pressed rockwool or a similar insulation material having a "d" of at least 60 mm, wherein the floor layer (3) is mounted between the flanges (2) and the floor layer (3) is covered, without being reinforced, with B 25 or a concrete of superior proficiency grade.

5. (Currently Amended) The prefabricated Prefabricated buildings or houses according to claim 20, wherein the at least one pair of pillars (4) comprises two sections of the pillar consists of MSH steel sections (extruded profiles) 60/60/5, St 37 or St 52 and at least one other conceivable sections and wherein the sections that they are interconnected by welded steel bridges of 80/80/10 or other variants in dependence of the

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chosen <u>pillar dimension</u> <u>section</u>, and in an axial distance from each other conforming to the statics specifications.

- 6. (Currently Amended) The prefabricated Prefabricated buildings or houses according to claim 20, wherein the two extremities of the pillars sections are connected to the floor frame (1) and the ceiling frame (6) by through junction gussets in conformity with statics specifications.
- 7. (Currently Amended) The prefabricated Prefabricated buildings or houses according to claim 20, wherein the number of the pair of pillars (4) is determined by statics requirements.
- 8. (Currently Amended) The prefabricated Prefabricated buildings or houses according to claim 20, wherein the pins (5) comprise consist of solid turned steel bars of St 37—or other conceivable materials, and wherein the pins (5) that they are used for connecting vertically the extremities sections of the pillars (4) of two modules and to connect a first module and a second module placed one on top of another.
- 9. (Currently Amended) The prefabricated Prefabricated buildings or houses according to claim 20, wherein a junction between the combination of the sections of the pillars (4) and with the pins (5) provides accurate vertical and horizontal structure of the building by means of a simple plug-in connection.

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#### 10. (Cancelled)

11. (Currently Amended) The prefabricated Prefabricated buildings or houses according to a modular steel frame construction method as claimed in claim 20, wherein the ceiling frame (6) comprises consists of sheet steel St 37 or 52, an edged or rolled to form four L-sections of L section 250/75/5, the latter being beveled and welded at their corners. or other conceivable sections.

### 12. (Cancelled)

- 13. (Currently Amended) The prefabricated Prefabricated buildings or houses according to claim 20, further including C 60, or C 80 or other steel sections forming the transverse bearer (7) welded into the ceiling frame (6) perpendicular to a longitudinal direction of the ceiling frame (6) and in an axial distance depending upon statics specifications.
- 14. (Currently Amended) The prefabricated Prefabricated buildings or houses according to claim 20, wherein the combination of the ceiling frame (6) with the floor frame (1) generates a beam (9) allowing a cantilever span of up to 14 m.

# 15. (Cancelled)

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16. (Currently Amended) The prefabricated Prefabricated buildings or houses according to claim 20, further including at least a pair of beams (9) interconnected either by screw-bolts or through welding, the method of interconnection depending upon a cantilever span.

17. (Cancelled)

- 18. (Currently Amended) The prefabricated Prefabricated buildings or houses made by a modular steel frame construction method, such that fully-equipped modules or compartments are assembled in a specific order to compose a complete building or house, said modules comprising: the prefabricated buildings or houses comprising:

  Sawe depends or below when
  - a) a ceiling frame, (6);
  - b) a floor frame (1);
  - c) Z-shaped sections welded into inside the floor frame (1); wherein the Z-shaped sections form flanges (2); and
  - at least one pair of pillars (4) interconnected by welded bridges, and pillar, wherein the bottom of each of the well as pillar comprises a first section and a second section, wherein the first section is connected to the floor frame (1) by a transverse bearer (7) and pins (5) and the top of each of the pillars second section is connected to the ceiling frame (6) by a transverse bearer (7) and pins (5); and

wherein the sections are interconnected by the use of a transverse bearer and pins

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wherein the <u>fully-equipped</u> modules <u>including</u> exterior walls, electrical and sanitary fittings, floor and ceiling finishings, roof coverings and windows (8) are <u>united</u>, interconnected, <u>and</u> mounted <u>on top of another and solely and welded</u> at the building site.

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- 19. (Currently Amended) <u>The prefabricated Prefabricated</u> buildings or houses according to claim 20, wherein the buildings or houses include several stories.
- 20. (Currently Amended) Prefabricated buildings or houses—made by a modular steel frame construction method, such that fully-equipped modules or compartments are assembled in a specific order to compose a complete building or house, said modules comprising: the prefabricated buildings or houses comprising:
  - a) a ceiling frame (6);
  - b) a floor frame (1);
- c) Z-shaped sections welded <u>into inside</u> the floor frame (1); wherein the Z-shaped sections form flanges (2); and
- d) at least one pair of pillars (4) interconnected by welded bridges, and pillar, wherein the bottom of each of the pillars pillar comprises a first section and a second section, wherein the first section is connected to the floor frame (1) by a transverse bearer (7) and pins (5) and the top of each of the pillars second section is connected to the ceiling frame (6) by a transverse bearer (7) and pins (5);

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wherein the sections are interconnected by the use of a transverse bearer and pins; wherein the ceiling frame, the\_floor frame, and the at least one pair of pillar form a module; and

wherein the module <u>includes</u> include exterior walls, interior walls, fittings, interior finishing, roof covering, and windows.

- 21. (New) The prefabricated buildings or houses according to claim 20, wherein the floor frame (1) comprises at least four standardized steel sections (extruded profiles), wherein the sections are beveled and welded at their corners to form corners.
- 22. (New) The prefabricated buildings or houses according to claim 20, wherein the at least one pair of pillars (4) comprises two steel sections (extruded profiles) and wherein the sections are interconnected by welded steel bridges in dependence of the chosen pillar dimension, and in an axial distance from each other conforming to the statics specifications.
- 23. (New) The prefabricated buildings or houses according to claim 20, wherein the pins (5) comprise solid turned steel bars, and wherein the pins (5) are used for connecting vertically the extremities of the pillars (4) of two modules placed one on top of another.
- 24. (New) The prefabricated buildings or houses according

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to claim 20, wherein the ceiling frame (6) comprises sheet steel, edged or rolled to form four L-sections, the latter being beveled and welded at their corners.

axial distance depending upon

25. (New) The prefabricated buildings or houses according to claim 20, further including steel sections forming the transverse bearer (7) welded into the ceiling frame (6) perpendicular to a longitudinal direction of the ceiling frame

specifications.